

Notice of Allowability

Application No.

10/697,163

Examiner

EUNCHA P. CHERRY

Applicant(s)

TAKAKUBO, YUTAKA

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.
2. ☒ The allowed claim(s) is/are 1-8.
3. ☒ The drawings filed on 31 October 2003 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 2/2/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

EUNCHA P. CHERRY
Primary Examiner
Art Unit: 2872

DETAILED ACTION

Allowable Subject Matter

1. Claims 1-8 are allowed.
2. The following is an examiner's statement of reasons for allowance: claims are allowable for the reason that the prior art does not teach or reasonably suggest the at least one of lens surfaces of each of the plurality of second lens groups except the lens surface tiled with respect to the optical surface reference axis of the first lens group that is formed to be an aspherical surface defined by a two-dimensional polynomial expression as set forth in the claimed combination.

Shiraishi (US Patent No. 5,715,078) discloses the scanning optical system for emitting a plurality of beams scanning in a main scanning direction comprising (Figs. 1 and 2): a light source that emits the plurality of beams (3B, 3C, 3M, 3Y); a deflector that simultaneously deflects the plurality of beams incident thereon to scan in the main scanning direction (5), incident angles of the plurality of beams with respect to said deflector being different from each other in an auxiliary scanning direction which is perpendicular to the main scanning direction; and an imaging optical system that of beams deflected by said deflector to form plurality of beam spots scanning on

Art Unit: 2872

respective scan target surfaces in the main scanning direction (Fig. 2, 21), wherein the imaging optical system has: a first lens group through which all of the beams deflected by said deflector pass (27); and a plurality of second lens groups respectively provided for the plurality of beams each of the plurality of beams emerged from said first lens passing through corresponding one of the plurality of second lens groups (39B, 39C, 39M, 39Y), but each of the plurality of second lens groups has a lens surface whose optical surface reference axis **is not** tilted with respect to an optical surface reference axis of the first lens group and at least one of lens surfaces of each of the plurality of second lens groups except the lens surface tilted with respect to the optical surface reference axis of the first lens group **is not** formed to be an aspherical surface defined by a two-dimensional polynomial expression.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

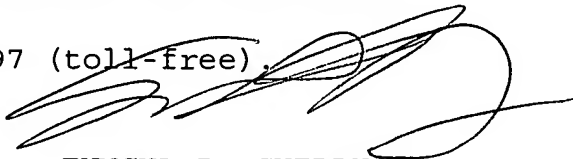
Conclusion

Art Unit: 2872

Any inquiry concerning this communication or earlier communications from the examiner should be directed to EUNCHA P. CHERRY whose telephone number is 571-272-2310. The examiner can normally be reached on M-F 6:30-4:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DREW DUNN can be reached on 571-272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



EUNCHA P. CHERRY
Primary Examiner
Art Unit 2872

10/1/04